

STUDENT LEARNING OUTCOMES ASSESSMENT REPORT **EDUCATION AND CONSULTING SERVICES: BASIC ADULT CRITICAL CARE**

DATE: 2015-2016

REPORT SUBMITTED BY: Ruth McFee/Beverly McLawyer TITLE: Senior Nursing Instructors

Section One: SLO and Assessment Method

	Basic Adult Critical Care
	Didactic component
Course(s)	Clinical component
	Preceptorship component (discontinued with April 2016 program)
	The registered nurse applies academic, technical, collaborative,
Student Learning Outcomes	communication, and critical thinking skills in the safe care of culturally
Student Learning Outcomes	diverse patients in a critical care setting.
	Students:
	SLOGE 1: Apply critical thinking to communicate effectively,
	collaborate with others, show comprehension, and research subject
	matter through reading, speech, demonstration, and writing.
	SLOGE 2: Demonstrate knowledge of the human mind, body,
	behavior and responses to internal and external stressors through
	interactions with others and the provision of care. Demonstrate
	accountability in the application of this knowledge and skill in an
	ethical and professional manner.
Incomparation of Student	SLOGE 3: Incorporate a legal/ethical approach in dealing with the
Incorporation of Student	community through the acceptance of diverse philosophical, cultural,
Learning Outcomes: General Education (SLOGE)	and religious beliefs, and the application of cultural sensitivity, which
Education (SLOGE)	prepares the students to live and work in a multicultural and global
	environment.
	SLOGE 4: Incorporate fundamental mathematical processes and
	reasoning and demonstrate competency in applying mathematical
	formulas, conveying knowledge, evaluating mathematical information,
	and problem solving.
	SLOGE 5: Develop competency in the application of technological
	skills to access information online, create and organize data,
	communicate information, use learning software programs, and
	operate basic technological equipment.
	Students:
	SLOC1: Possess knowledge and life skills necessary to provide safe, effective and efficient care, which enables them to adapt to living and
	working in a multicultural environment and provide health
	maintenance and promotion in a global context.
	SLOC 2: Utilize critical thinking, problem-solving skills, and evidence-
Correlated Student Learning	based strategies in effectively communicating and collaborating with
Outcomes: College (SLOC)	others to promote and maintain optimal health in their area of
- ()	practice.
	SLOC 3: Pursue lifelong learning to enrich personal and professional
	development; enjoy the benefits of inquiry and self-discovery; and
	embrace change in the fast-paced world of technological advances
	and health innovations.
Correlated Student Learning	SLOP: Students will demonstrate ongoing professional development
Outcomes: Program (SLOP)	through application of academic, technical, collaborative,

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	communication and critical thinking skills in the safe care of culturally		
	diverse critically ill patients in a variety of settings.		
Method of Assessment	 2 quizzes each worth 20% of grade Final exam worth 60% of grade, must have a minimum grade of 75% to pass Overall score of 75% or greater. Score a Pass on assessment project Satisfactory performance on each criteria included on Clinical Competency Evaluation form Satisfactory completion of a 72-hour preceptorship Performance Indicators: Institutional effectiveness (IE) indicator III.E: Course pass rate of 80% IE indicator III.F: Student evaluations of Instructors meet or exceed threshold of 3.5 IE indicator III.G: Student evaluations of Program meet or exceed threshold of 3.5 IE indicator III.A: Employer Satisfaction survey meets or exceed threshold of 3.0 (competent) 		
Data Collection Schedule	Period: 2015-2016 Annual Academic year		
Required Resources	Clerical support, photocopier, course syllabi, tests, scantrons, test grading machine, classroom and audiovisual equipment, critical care supplies and equipment, critical care clinical sites, skills lab with life support equipment, e.g. defibrillator monitors, defibrillator manikin, airway equipment.		

Section Two: Analysis of Assessment Results

	Select all that apply:		
	Formative Evaluation Summative		
Outcomes Evaluation Method	□ Direct Evidence		
	Student gradebook		
	Clinical competencies		
Evaluation Tools	Skills inventory checklists		
	Student program and instructor evaluation		
	Employer surveys		
	Didactic:		
	Time Period: Time Period:		
	Summer 2015 Fall 2015		
	21 23 students enrolled		
	0 student withdrawn		
Analysis of Data Danaut	1 0 students failed (including WF)		
Analysis of Data Report	1 0 students attrited (course attrition)		
	21 23 students completed		
	20 23 students passed		
	95.2 100 students who completed that passed (%)		
	4.86 4.55 course evaluation rating		
	4.87 4.77 course instructor rating		

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4.61	4.75	overall rating (Global Index)
yes	yes	pass rate threshold achieved(yes or no)
<u>yes</u>	yes	all items achieved threshold (yes or no)
Time Period:	Time Period	d:
Winter 2016	Spring 2016	
18	<u>18</u>	students enrolled
0	0	student withdrawn
0	0	students failed (including WF)
0	0	students attrited (course attrition)
<u>18</u>	18	students completed
<u>18</u>	18	students passed
100	100	students who completed that passed (%)
4.52	4.62	course evaluation rating
4.73	4.77	course instructor rating
4.72	4.76	overall rating (Global Index)
yes	yes r	pass rate threshold achieved (yes or no)
yes	yes	all items achieved threshold (yes or no)
		,

Course/Program Rating Scale	Number of Items at this Rating Scale	Percent of Items at this Rating Scale*
4.5 – 5.0	47	97.9%
4.0 – 4.4	1	2.1%
3.5 – 3.9		
3.0 – 3.4		
2.0 – 2.9		
1.0 - 1.9		
Total # Items 48		Total = 100%
* Do not round up numbers		

Summer 2015:

<u>Didactic:</u> Student evaluation scores were very high and comments were very positive, except for some comments about the smell and the heat in the room. D. DeHart continually worked with facilities management on these issues. The comments were forwarded to her to use to support our need to fix these problems. The smell was not a problem during subsequent course offerings, but the heat/cold were sometimes an issue.

Additional Comments

There was a comment that the course runs over too short of a time period. Beginning the Summer of 2015, the faculty started to plan for a new program structure which began with the Winter 2016 program to address this issue.

One of the students verbally suggested that an important piece of information that is included in a test question also be added to a handout; this was added.

All instructors had very positive comments written about them. An example of the positive comments from students:

All the nurses/instructors are so patient and knowledgeable. They were readily available to answer any questions I had.

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Clinical: Scores were high and comments were good. This was the first clinical after implementation of ORCHID. The nurses attending this program went into the ICU to shadow their preceptor the week after ORCHID was implemented. A lot of communication was required to ensure that these nurses had ICU documentation privileges so that they could start practicing with ORCHID prior to clinical. The previous computer workshop covered a documentation system that was only used in the ICUs. The lesson plan of this workshop was changed to cover ORCHID, and was conducted in such a way that information could be shared/discussed by all of the students and instructors since the system was new to everyone. Most of the instructors were able to attend. The question on the evaluation asking if computer workshop was helpful received a high score. One student was asked what would be helpful to include for future students, who will have had at least 6 months experience with ORCHID. She said instruction and practice with documenting ICU modalities (e.g. ICP, Pulmonary Artery Catheter) would be helpful. This recommendation was implemented in subsequent workshops. The lesson plan was updated with each course subsequently to include issues/concerns related to documenting on this new system.

Example of one of the positive comments:

 Great program with instructors that encouraged questions and promoted critical thinking at all times. Clinical experiences were very valuable.

Fall 2015

<u>Didactic:</u> Comments were very positive for the most part. Several stated that the program should be more spread out. As stated above this sort of comment is part of the reason we changed the program structure starting with the Winter 2016 program. One student commented that the guizzes did not have the same test structure as the test. Quizzes are taken from one of 3 versions of the final, so this is not accurate. It is difficult to know what the student meant. This comment was not made in subsequent programs. Clinical: There were several comments stating that expectations were different among the instructors, that they were expected to be perfect, and that hands on should take place early on. These are unusual comments. The plan to incorporate clinical during didactic should help with the request for early hands on experiences. The instructors regularly meet to ensure as much as possible that they all have the same expectations. There were no more of this type of comment with subsequent programs.

Winter 2016

We implemented a new structure in order to spread the didactic program over 3 weeks rather than over 2 weeks. During the first week of didactic, the nurses spent 2 days shadowing a preceptor. Then clinical with the instructors was integrated into the 2nd and 3rd week of didactic, and clinical continued after the final exam. We also discontinued a workshop day during clinical so that students would have an additional day doing patient care. The faculty had discussed

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this and decided that the day doing patient care would be more valuable than the workshop day. Each quiz and the exam were able to be scheduled on a Monday so that the students would have time to study the material over the weekend. Students' comments were overwhelmingly positive regarding the new plan. There were many who commented that they liked the integration of clinical with didactic, spreading didactic over 3 weeks, and having the weekend to study for each quiz/exam.

There were some complaints from the preceptors regarding the 2 days that the students were in the clinical area during week 1 of didactic. Preceptors stated that they were not informed of the plan and so it was apparent that the managers had not shared the plan with the preceptors. For subsequent programs, we sent the students with a letter to hand to their preceptor each day to explain the goals for the day. Along with multiple reminders to the managers, this worked very well and we did not receive any more complaints.

Didactic:

One student commented that handouts with pictures should be in color; this is not feasible. In the future, the handouts will be placed on the intranet so that the students can have access.

Another commented that the ORCHID workshop should be earlier. There is no time to do the workshop as requested.

These comments have not been repeated in subsequent programs.

Clinical: All clinical comments were very positive. Here are some examples:

- I felt the instructors were knowledgeable and approachable versus intimidating. I enjoyed the thoroughness of their explanation and helped it connect the dots.
- I really liked the clinical portion. All of the teachers were readily available, even if they weren't your instructor for the day. I appreciated how they communicated with you how you were doing, so you had a good idea of what to work on. Thank you very much, and will continue to use the instructors as a resource via email.
- The instructors were extremely helpful during clinical. I appreciate
 how they would help me connect the dots to look at the "big
 picture"

The coordinator and one of the instructors met with the 2 nurses who coordinate a "Post Phase I" all day program which the nurses attend a month or 2 after completing the program to determine which topics should be included.

Spring 2016

With this program, we lengthened clinical by 2 days and discontinued the preceptorship component. The faculty had determined that the extra clinical would be more beneficial, and more actual instructor 1:1 instruction would be provided. The decision was made with buy-in

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from the Nurse Managers and Clinical Nursing Director. After completion of the program, the nurses would still have a preceptorship/orientation, but it would not be part of the program. Didactic:

Comments were overall good. There were some suggestions about how we should arrange the lectures. We always take their suggestions into consideration, but there are a lot of other things things that need to be considered – e.g. assessment lectures should be during the first week, arterial line needs to be before hemodynamics, hemodynamic and mechanical ventilation before the workshops.

There was a comment that the nutrition lecture was too long and hard to follow. During the January 2017 program the other DHS facility instructors attended the program to evaluate the content for DHS standardization. They also identified that the lecture is too long and complicated. The lecture will be shortened and simplified starting with the July 2017 program.

Clinical:

Clinical:

Students expressed verbally that they enjoyed the integrated days of clinical with didactic. They said that it was good to be able to apply the information right away. One suggested that those integrated days have a focus, e.g. mechanical vents and ABGs or hemodynamics, rather than doing patient care. We considered this suggestion, but determined that the students really do need to start assuming patient care early on with a continued focus on what they had already learned in didactic.

The comments on the course evaluations were very positive. One student suggested post conference at the end of 2 or 3 clinical days. With the next program, we incorporated a post conference on 1 of the clinical days.

Written Comments included:

- All instructors were knowledgeable and approachable with any questions or concerns.
- All instructors were really good, helped me apply my knowledge to the clinical and increased my critical thinking.

Analysis of Data Report

Time Period: Time Period:			
Summer 201	.5 Fall 2015		
12	14	students enrolled	
0	0	student withdrawn	
2	1	students failed (including WF)	
2	1	students attrited (course attrition)	
12	14	students completed	
<u>10</u>	13	students passed	
83.3	92.9	students who completed that passed (%)	
4.67	4.33	course evaluation rating	
4.66	4.38	course instructor rating	
4.67	4.36	overall rating (Global Index)	
yes	yes	pass rate threshold achieved (yes or no)	
yes	yes	all items achieved threshold (yes or no)	
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Time Period:	Time Per	riod:	
Winter 2016	Spring 201	<u>.6</u>	
<u>15</u>	9	students enrolled	
0	1	student withdrawn	
2	0	students failed (inc	luding WF)
2	1	students attrited (c	
<u>15</u>	8	students completed	ĺ
<u>13</u>	8	students passed	
86.7	100	students who comp	eleted that passed (%)
4.36	4.77	course evaluation r	ating
4.52	4.98	course instructor ra	iting
4.44	4.87	overall rating (Glob	al Index)
yes	yes	pass rate threshold	achieved (yes or no
yes	yes	all items achieved t	hreshold (yes or no)
	-		,
Course/P	rogram	Number of Items at	Percent of Items at
Rating Scale		this Rating Scale	this Rating Scale*

Course/Program Rating Scale	Number of Items at this Rating Scale	Percent of Items at this Rating Scale*
4.5 – 5.0	38	71.7
4.0 – 4.4	13	24.5
3.5 – 3.9	2	3.8
3.0 – 3.4		
2.0 – 2.9		
1.0 - 1.9		
Total # Items 53		Total = 100%
* Do not round up numbers		

Section Three: Evaluation/Improvement/Re-evaluation of Outcomes Cycle

Student performance:

Overall 2015-2016 course pass rates for 4 programs (preceptorship, 3 programs only):

- Didactic pass rate was 79 out of 80* (98.8%) with a range of 95.2-100%
- Clinical pass rate was 44 out of 49* (89.8%) with a range of 83.3%-100%.
- Preceptorship pass rate was 44 out of 44 (100%)

Evaluation Findings

*Didactic and clinical enrollment vary because participants from other DHS facilities attend the didactic component only, and also some of the participants in clinical retake the clinical component.

The pass rate for all three components was above threshold every time the course was offered.

Four nurses failed clinical during this evaluation period. One nurse failed the clinical component twice. This nurse was clearly not ready to work in the ICU setting and was reassigned to a non-ICU area. One nurse realized the ICU was not the right place for that nurse after

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failing clinical and was reassigned to a non-ICU area. Two of the nurses who failed clinical passed on their 2nd attempt. **Employer Satisfaction Survey:** Survey return rate was 31 out of 44 (70.5%). Results exceeded threshold of 3.0 (competent evaluation). Average was 3.56 which was the same average as last year. The range was 3.0-3.82. Course performance: Student evaluations of program and all instructors exceeded threshold of 3.5. Every item for clinical during every course offering was rated above 3.5, and every item/every instructor for the didactic component was rated above 4.0. Identify items requiring action (as discussed above): During the Winter 2016 program, there were some complaints from the preceptors that they were not informed about the students being assigned to them for 2 days during the first week of didactic. Letters were sent with the students to give to the preceptors and continual communication with the managers solved the issue. Implementation of ORCHID required changes to the content and structure of the computer workshop. The lesson plan is revised as needed with each program to meet students' needs and to address issues/problems identified in the clinical area. Identify student evaluation comments requiring attention (as discussed above): The structure of the program was changed in response to comments that there is too much content to be learned in 2 weeks. The students benefited from the change as evidenced by their verbal and written comments. One of the students suggested that one piece of important information that is part of a test question be added to a handout; this was added Ouality improvement needs: The program is offered 4 times per year, so problems are addressed with each program and changes made as needed. Continue to update the ORCHID workshop lesson plan with each program, keeping in mind the needs of the students. These students will already be competent with ORCHID basics, but we will evaluate what they need in terms of critical care **Plans for Improvement** documentation. Beginning in the Fall of 2016, we started working on standardizing

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critical care training across all of the DHS hospitals. As a part of the standardization, clinical will be led by the preceptors, who will



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	work one on one with the students throughout clinical. The instructors will support the education and be involved in the student evaluation. There will also be changes to the didactic program. A work group led by the Basic Adult Critical Care Program coordinator is planning implementation.	
Re-evaluation Due Date After each program and with the 2016-2017 SLO.		
Suggestions for Change in SLO and Rationale		
Additional Comments	None	

Contributors:

Beverly McLaywer, RN Tammy Blass, RN Ruth McFee, RN

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